

		HISTORY CARD FOR CHILLER			
Equipment:	chiller 1,000 ton	Equipment number:		1	Equipment Rated :
Building:	Serm-Mit Tower	Location:		14th Floor	
Brand:	Carrier	Model:	19DR 6769		
Serial number:	M506 CQ	Motor Serial number:			
Year of Mfg:		Year of Installation:			
Priority class:	Critical / Non critical	Warranty expiration:			
Equipment Supplier Name & Address:		Installation Contractor Name & Address:			
Contact person:	Sucheep	Contact person:	Anurak		

Note: Please enter the "DETAILS" of Break down maintenance and Planned Preventative Maintenance in this table

No.	Details (รายการ)	Date (วัน-เดือน-ปี)		Total Down Time (รวมเวลาหยุดเครื่อง) (Hrs.)	Responded by (ผู้ดำเนินการ)	Cost (ค่าใช้จ่าย) (BAHT)	Recorded by (ผู้บันทึก)
		Start (เวลาเริ่ม)	Finish (เวลาซ่อมเสร็จ)				
1	ซ่อมรั้ว Purge Tank	28-Sep-10	2-Oct-10	120	Carrier	284,620.00	สันติ
2	Yearly Maintenance	29-Oct-10	4-Nov-10	168	Carrier	210,500.00	สันติ

		HISTORY CARD FOR CHILLER			
Equipment:	chiller 1,000 ton	Equipment number:		1	Equipment Rated :
Building:	Serm-Mit Tower	Location:		14th Floor	
Brand:	Carrier	Model:	19DR 6769		
Serial number:	M507 CQ	Motor Serial number:			
Year of Mfg:		Year of Installation:			
Priority class:	Critical / Non critical	Warranty expiration:			
Equipment Supplier Name & Address:		Installation Contractor Name & Address:			
Contact person:	Sucheep	Contact person:	Anurak		

Note: Please enter the "DETAILS" of Break down maintenance and Planned Preventative Maintenance in this table

No.	Details (รายการ)	Date (วัน-เดือน-ปี)		Total Down Time (รวมเวลาหยุดเครื่อง) (Hrs.)	Responded by (ผู้ดำเนินการ)	Cost (ค่าใช้จ่าย) (BAHT)	Recorded by (ผู้บันทึก)
		Start (เวลาเริ่ม)	Finish (เวลาซ่อมเสร็จ)				
1	ซ่อม Hi pressure Switch	1 Nov 10	1 Nov 10	24	Carrier	9,000.00	สันติ
2	Yearly Maintenance	8-Nov-10	15-Nov-10	168	Carrier	200,700.00	สันติ

		HISTORY CARD FOR CHILLER			
Equipment:	chiller 500 ton	Equipment number:		1	Equipment Rated :
Building:	Serm-Mit Tower	Location:		14th Floor	
Brand:	Carrier	Model:	19DM 78506 CQ		
Serial number:	9004J4297	Motor Serial number:			
Year of Mfg:		Year of Installation:			
Priority class: Critical / Non critical		Warranty expiration:			
Equipment Supplier Name & Address:		Installation Contractor Name & Address:			
Contact person: Sucheep		Contact person: Anurak			


Note: Please enter the "DETAILS" of Break down maintenance and Planned Preventative Maintenance in this table

No.	Details (รายการ)	Date (วัน-เดือน-ปี)		Total Down Time (รวมเวลาหยุดเครื่อง) (Hrs.)	Responded by (ผู้ดำเนินการ)	Cost (ค่าใช้จ่าย) (BAHT)	Recorded by (ผู้บันทึก)
		Start (เวลาเริ่ม)	Finish (เวลาซ่อมเสร็จ)				
1	เปลี่ยน Refrigerant Sensor	15 Jul 10	15 Jul 10	24	Carrier	9,450.00	สันติ
2	Yearly Maintenance	14-Oct-10	21-Oct-10	168	Carrier	118,184.00	สันติ

ELECTRICITY EXPENSE CALCULATION FOR AIR CONDITIONING EQUIPMENT

- 1) ELECTRICAL ENERGY COST PER UNIT IS BASED ON TOD. RATE BY : COST (BATH) - KW * (RE/DAY) * (DAY/YEAR) * UNIT RATE (BATH / KW) .
 - 2) ELECTRICAL DEMAND CHARGE IS BASED ON TOD. RATE BY : COST (BATH) - KW * 12 MONTH/YEAR * DEMAND CHARGE RATE (BATH / KW)
 - 3) ELECTRICAL F-T COST PER UNIT IS BASED ON TOD. RATE BY : COST (BATH) - KW * (RE/DAY) * (DAY/YEAR) * F-T (BATH / KW) .
 - 4) TOD RATE & DEMAND CHARGE AND FT RATE SHALL BE SEPARATED INTO 3 PARTS OF TIME BY THIS BELOW TABLE
- (MODE 1 : ON PEAK AT 06:30 PM - 09:30PM , MODE 2 : PARTIAL PEAK AT 00:00 AM - 06:30 PM , MODE 3 : OFF PEAK 09:30 PM - 00:00 AM)

Serranitr - 1000 - 520		Secondary input data reference	
Capacity (Ton)	1,000	High Efficiency	0.520 Kw/Tr
Qty	1	Standard Efficiency	0.620 Kw/Tr
% Diversity Usage	00%		
		On peak	Partial Peak
TOD Rate : Billing Period (Hrs./Day)	1	5	1

PROJECT Serranitr - 1000 - 520			ELECTRICITY  DESCRIPTION		EQUIPMENT : Existing 1000 Ton - 0.62				EQUIPMENT : Trane High Efficiency 0.520 Kw/Tr			
EQUIPMENT MODEL	Existing 1000 Ton - 0.62	Trane High Efficiency 0.520 Kw/Tr	MODE OF TIME			YEARLY TOTAL EXPENSE BANT	MODE OF TIME			YEARLY TOTAL EXPENSE BANT		
			Peak (2 hrs.) 10:30-21:30	Partial Peak (10 hrs. 30 Min) 00:00-10:30	Off Peak (10 hrs. 30 Min) 21:30-00:00		MON-FRI (12 hrs.) 09:00-22:00	MON-FRI (11 hrs.) 22:00-09:00	SAT & SUN (24hrs.) 00:00-24:00			
CAPACITY TONS	1000	1000	DAILY OPERATING HRS FOR EACH MODE	1	0	1	1	0	1	1	0	1
KW / TON			UNIT RATE (BANT / KW-HR.)	1.7034	1.7034	1.7034	1.7034	1.7034	1.7034	1.7034	1.7034	1.7034
QTY	1	1	YEARLY EXPENSE FOR UNIT ELEC. RATE (BANT)	487,908	3,262,968	487,908	4,076,784	250,688	2,609,280	250,688	2,506,480	2,506,480
FULL LOAD (KW)			DEMAND CHARGE (BANT / KW-MONTH)	205.85	40.0	-	2,796,500	1,423,088	293,580	-	1,716,500	1,716,500
POWER INPUT	620	520	YEARLY EXPENSE FOR DEMAND CHARGE (BANT)	2,243,908	462,960	-	2,706,500	1,423,088	293,580	-	1,716,500	1,716,500
% AVERAGE RUN	00%	00%	F-T RATE CHARGE - (BANT/KW-HR)	0.9255	0.9255	0.9255	2,216,880	140,580	1,124,280	140,580	1,405,280	1,405,280
AVERAGE RUNNING	050	410	YEARLY F-T CHARGE EXPENSE - (BANT)	221,000	1,772,060	221,000	2,216,880	140,580	1,124,280	140,580	1,405,280	1,405,280
			TOTAL ELECTRICITY EXPENSE (YEARLY) PER SET	2,073,408	5,490,668	629,508	9,001,500	1,022,188	3,406,980	399,108	5,705,100	5,705,100
			TOTAL ELECTRICITY EXPENSE	2,073,408	5,490,668	629,508	9,001,500	1,022,188	3,406,980	399,108	5,705,100	5,705,100




SUMMARY ELECTRICITY EXPENSE	CHILLER MODEL	
	Existing 1000 Ton - 0.62	Trane High Efficiency 0.520 Kw/Tr
QTY	1	1
CAPACITY (TON)	1,000	1,000
KW / TON	0.620	0.520
YEARLY ELECTRICITY COST PER UNIT (BANT)	9,001,500	5,705,100
TOTAL ELECTRICAL EXPENSE	9,001,500	5,705,100

BY USING BETTER EFFICIENCY ,YOU CAN SAVE THE ELECTRICAL EXPENSE 3,293,400 BAHTS PER YEAR !!!

ELECTRICITY EXPENSE CALCULATION FOR AIR CONDITIONING EQUIPMENT

- 1) ELECTRICAL ENERGY COST PER UNIT IS BASED ON TOB. RATE BY: COST (BATH) - KW * (HR/DAY) * (DAY/YEAR) * UNIT RATE (BATH / KWH) .
- 2) ELECTRICAL DEMAND CHARGE IS BASED ON TOB. RATE BY : COST (BATH) - KW * (2) MONTH/YEAR * DEMAND CHARGE RATE (BATH/ KWH)
- 3) ELECTRICAL F-T COST PER UNIT IS BASED ON TOB. RATE BY: COST (BATH) - KW * (HR/DAY) * (DAY/YEAR) * F-T (BATH / KWH) .
- 4) TOB RATE & DEMAND CHARGE AND FT RATE SHALL BE SEPARATED INTO 3 PARTS OF TIME BY THIS BELOW TABLE
(MODE 1 : ON PEAK AT 06:30 PM - 09:30PM, MODE 2: PARTIAL PEAK AT 09:30 AM - 06:30 PM , MODE 3 : OFF PEAK 09:30 PM - 06:00 AM)

Serramitr - 500 - 504		Summary input data reference	
Capacity (Tonn)	500	High Efficiency	0.504 Kw/Tr
Qty	1	Standard Efficiency	0.770 Kw/Tr
% Diversity Usage	00%		
		On peak	Partial Peak
			Off Peak
TOB Rate : Running Period (Hr/Day)		1	0

PROJECT Serramitr - 500 - 584			ELECTRICITY  DESCRIPTION	EQUIPMENT : Existing 500 Tonn - 0.77			EQUIPMENT : Trane High Efficiency 0.504 Kw/Tr			
EQUIPMENT MODEL	Existing 500 Tonn - 0.77	Trane High Efficiency 0.504 Kw/Tr		MODE OF TIME			TOTAL EXPENSE	MODE OF TIME		
			Peak (2 hrs.) 10:30-21:30	Partial Peak (10 hrs. 30 Min) 09:00-10:30	Off Peak (10 hrs. 30 Min) 21:30-09:00		MON-FRI (12 hrs.) 09:00-22:00	MON-FRI (11 hrs.) 22:00-09:00	SAT & SUN (24hrs.) 00:00-24:00	
CAPACITY TONS	500	500	DAILY OPERATING HRS FOR EACH MODE				1	0	1	
KW / TON			UNIT RATE (BATH / KW-HR.)				1.7034	1.7034	1.7034	
QTY	1	1	YEARLY EXPENSE FOR UNIT ELEC. RATE (BATH)				191,508	1,532,900	191,508	1,452,300
FULL LOAD (KW)	305	292	DEMAND CHARGE (BATH / KW-MONTH)				209.93	0.0		
POWER INPUT			YEARLY EXPENSE FOR DEMAND CHARGE (BATH)				1,853,500	217,300	-	963,900
% AVERAGE RUN	00%	00%	F-T RATE CHARGE - (BATH/KW-HR)				0.9255	0.9255	0.9255	
AVERAGE (KW)	300	234	YEARLY F-T CHARGE EXPENSE - (BATH)				184,000	832,400	184,000	759,100
RUNNING			TOTAL ELECTRICITY EXPENSE (YEARLY) PER SET				1,349,000	2,501,700	295,500	4,226,200
			TOTAL ELECTRICITY EXPENSE				1,349,000	2,501,700	295,500	4,226,200



TOD RATE

SUMMARY ELECTRICITY EXPENSE	CHILLER MODEL	
	Existing 500 Tonn - 0.77	Trane High Efficiency 0.504 Kw/Tr
QTY	1	1
CAPACITY (TON)	500	500
KW / TON	0.770	0.504
YEARLY ELECTRICITY COST PER UNIT (BATH)	4,226,200	3,205,300
TOTAL ELECTRICAL EXPENSE	4,226,200	3,205,300

BY USING BETTER EFFICIENCY ,YOU CAN SAVE THE ELECTRICAL EXPENSE 1,020,900 BAHTS PER YEAR !!!

